

Project Name: Gold King Mine Site Location:

Silverton, San Juan County, Colorado

Project No. 0001/1408-01

Photo No. 1

Date: 08/04/2015

Direction Photo Taken:

North

Description:

Beginning investigation into collapsed adit.



Photo No.

Date: 08/04/2015

Direction Photo Taken:

North

Description:

Excavated next to DRMS-installed culvert, water muddy from soil disturbance.



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**Project Name:** 

Gold King Mine

Site Location:

Silverton, San Juan County, Colorado

Project No. 0001/1408-01

Photo No.

**Date:** 08/04/2015

Direction Photo Taken:

Down

Description:

Seepage from soil next to piping.



Photo No.

Date: 08/04/2015

Direction Photo Taken:

Down

Description:

Seepage next to the pipe is clear until entering disturbed soil.





**Project Name:**Gold King Mine

Site Location:

Silverton, San Juan County, Colorado

Project No. 0001/1408-01

Photo No.

**Date:** 08/04/2015

Direction Photo Taken:

North

Description:

DRMS looking at adit excavation progress.



Photo No.

Date: 08/04/2015

Direction Photo Taken:

West

Description:

Water minimally murky from disturbed soil and water entering the North Fork from site.



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**Project Name:** 

Gold King Mine

Site Location:

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Project No. 0001/1408-01

Photo No. 7

Date: 08/04/2015

Direction Photo Taken:

South/Down

Description:

Hay bales installed as filter for sediment in North Fork.



Photo No.

Date: 08/04/2015

Direction Photo Taken:

Northwest

Description:

Continuing excavation at the collapsed adit, no solid bedrock found for tunnel support.



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**Project Name:** 

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Site Location:

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Photo No.

**Date:** 08/04/2015

Direction Photo Taken:

Northeast

Description:

First signs of adit, support pillar with lagging.



Photo No. 10

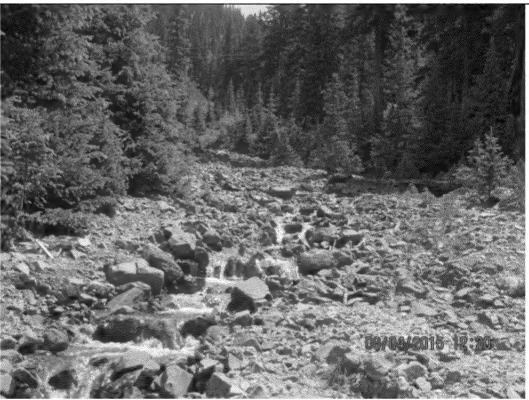
Date: 08/04/2015

Direction Photo Taken:

East

Description:

Water of the North Fork just upstream of Cement Creek.



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**Project Name:** 

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Site Location:

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Photo No. 11

**Date:** 08/04/2015

Direction Photo Taken:

East

Description:

Water of the North Fork just upstream of Cement Creek.



Photo No. 12

Date: 08/04/2015

Direction Photo Taken:

North

#### Description:

Collapsed supports uncovered above anticipated adit, no sign of bedrock above the adit area.



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**Project Name:** 

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Site Location:

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**Project No.** 0001/1408-01

Photo No. 13

**Date:** 08/05/2015

Direction Photo Taken:

North

**Description:**Adit conditions the morning of 8/5.



Photo No.

Date: 08/05/2015

14

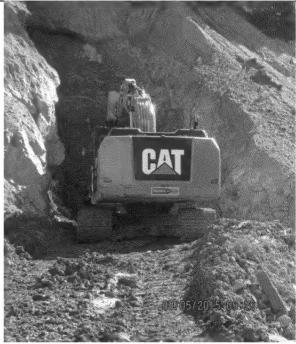
Direction Photo Taken:

iakeii.

Northeast

Description:

Excavating material above the collapsed adit.





**Project Name:** 

Gold King Mine

Site Location:

Silverton, San Juan County, Colorado

Project No. 0001/1408-01

Photo No. 15

**Date:** 08/05/2015

Direction Photo Taken:

North

Description:

Bedrock found above the anticipated adit.



Photo No. 16

**Date:** 08/05/2015

Direction Photo Taken:

North

Description:

Cleaning out excavated material, small leak.



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**Project Name:** 

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Site Location:

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Photo No. 17

**Date:** 08/05/2015

Direction Photo Taken:

North

Description: Small leak close up.



Photo No. 18

Date: 08/05/2015

Direction Photo Taken:

North

**Description:**Hole starting to give way to flow.



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**Project Name:** 

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Site Location:

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Project No. 0001/1408-01

Photo No. 19

Date: 08/05/2015

Direction Photo Taken:

Northeast

Description:

Adit flow increasing.



Photo No. 20

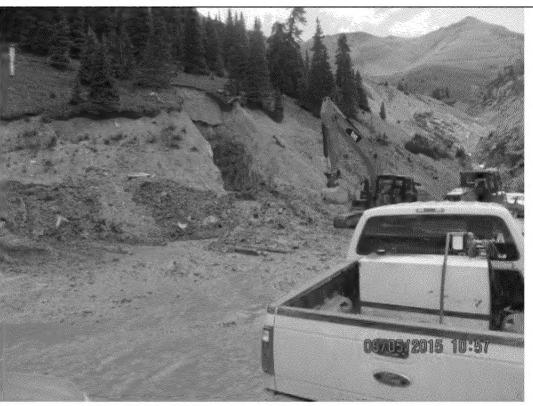
Date: 08/05/2015

Direction Photo Taken:

Northeast

Description:

Water flooding out at increased rate.



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**Project Name:** 

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Site Location:

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Photo No. 21

**Date:** 08/05/2015

Direction Photo Taken:

West

Description:

Water flowing along access road and across waste dump



Photo No. 22

Date: 08/05/2015

Direction Photo Taken:

Southeast

Description:

Water flowing over the edge of the waste dump and collapsing the edge



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Project Name:

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Site Location:

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Project No. 0001/1408-01

Photo No. 23

Date: 08/05/2015

Direction Photo Taken:

Southwest

Description:

Exit route starting to collapse



Photo No. 24

Date: 08/05/2015

Direction Photo Taken:

Southeast/Down

Description:

Edge of the tailings dump collapsed, suburban trapped and half submerged in center of photo.



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**Project Name:** 

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Site Location:

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Photo No. 25

**Date:** 08/05/2015

Direction Photo Taken:

Northeast

Description: Gold King adit exposed.



Photo No. 26

Date: 08/05/2015

Direction Photo Taken:

Southeast

#### Description:

Water flow washing out the existing road. Note Suburban in left side of photo.



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Project Name:

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Site Location:

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0001/1408-01

Photo No. 27

Date: 08/05/2015

Direction Photo Taken:

North

Description:

Exposed adit, roughly 10 feet wide by 15 feet high.



Photo No. 28

Date: 08/05/2015

Direction Photo Taken:

North

Description:

pH of discharge water is approximately 4 to 4.5.



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**Project Name:** 

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Site Location:

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Photo No. 29

**Date:** 08/05/2015

Direction Photo Taken:

Northeast

Description:

Excavator redirecting water into existing halfpipe channel.



Photo No 30

**Date:** 08/05/2015

Direction Photo Taken:

Southeast/Down

Description:

Collapsed portion of waste dump and road wash out.



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Project Name:

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Site Location:

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Photo No. 31

Date: 08/05/2015

Direction Photo Taken:

Northeast

Description: Adit area after regrading.



Photo No. 32

Date: 08/05/2015

Direction Photo Taken:

North

Description:

Exposed adit and redirected flow, flow is beginning to subside.



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**Project Name:** 

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Site Location:

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Photo No.

Date: 08/05/2015

Direction Photo Taken:

East

Description:

Redirected flow into existing half culvert channel.



Photo No. 34

Date: 08/05/2015

Direction Photo Taken:

North

Description: Closeup of adit



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Photo No.

Date: 08/05/2015

Direction Photo Taken:

West

Description:

Excavator beginning work to secure safe exit route for equipment, vehicles, and personnel.



Photo No 36

Date: 08/05/2015

Direction Photo Taken:

East

Description:

Existing flow channel at maximum capacity



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Site Location:

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Photo No. 37

Date: 08/05/2015

Direction Photo Taken:

Southwest/Down

Description:

Excavator progress on fixing access road to create a safe exit route



Photo No. 38

Date: 08/05/2015

Direction Photo Taken:

East

Description:

Existing culvert flows subsiding minimally.



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Site Location:

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Project No. 0001/1408-01

Photo No. 39

**Date:** 08/05/2015

Direction Photo Taken:

North

Description:

No changes visible in adit structure or supports. Sloughing of materials inside the mine can be heard.



Photo No. 40

Date: 08/05/2015

Direction Photo Taken:

South/Down

Description:

Excavator progresses to washed out North Fork crossing.



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Project Name:

Gold King Mine

Photo

No

41

Site Location:

Silverton San Juan County, Colorado

Project No. 0001/1408-01

Date: 08/05/2015

Direction Photo Taken:

Southwest/Down

Description:

Noted visitor to the site, unknown person, walked up to excavator at North Fork crossing and then back to vehicle.



Photo No 42

Date: 08/05/2015

Direction Photo Taken:

Southwest/Down

Description: Visitor leaving



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Site Location:

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Photo No. 43

Date: 08/05/2015

Direction Photo Taken:

South/Down

Description:

Excavator continues to fix access road.
Continued high flow is slowing progress.



Photo No. 44

Date: 08/05/2015

Direction Photo Taken:

East

Description: Half culvert flow continues to subside



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**Project Name:** 

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Site Location:

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Project No. 0001/1408-01

Photo No. 45

**Date:** 08/05/2015

Direction Photo Taken:

North

#### Description:

Water levels lowering at adit entrance, no visible changes to structure.



Photo No. 46

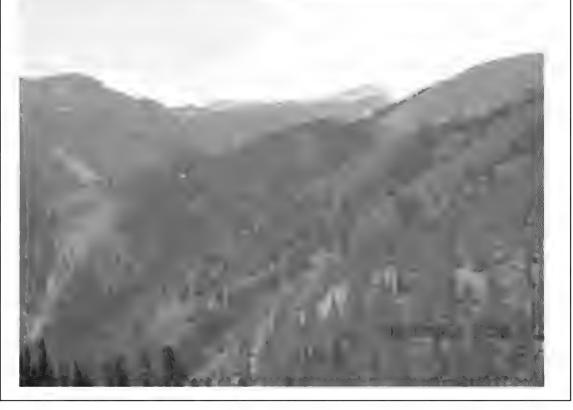
Date: 08/05/2015

Direction Photo Taken:

West

#### Description:

Flight for life Helicopter coming up the valley to pick up a person who crashed a vehicle on Corkscrew Pass, not related to this event.



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**Project Name:** 

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Site Location:

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Photo No. 47

Date: 08/05/2015

Direction Photo Taken:

Southwest

Description:

Close up of Flight for Life.



Photo No. 48

Date: 08/05/2015

Direction Photo Taken:

Northeast

Description:

Flow path from adit, water flow appears to have stabilized around 1400.



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**Project Name:** 

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Site Location:

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Photo No. 49

Date: 08/05/2015

Direction Photo Taken:

North

Description:

pH measured at approximately 4.5.



Photo No. **50** 

Date: 08/05/2015

Direction Photo Taken:

Southwest/Down

Description:

DRMS arrives back on site, had visited the site around 0930 to check on progress of investigation, left approximately 1030, prior to blowout.



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**Project Name:** 

Gold King Mine

Site Location:

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Project No. 0001/1408-01

Photo No. **51** 

**Date:** 08/05/2015

Direction Photo Taken:

North

## Description:

Looking up from the toe of the Gold King waste dump directly south of the adit.



Photo No. **52** 

**Date:** 08/05/2015

Direction Photo Taken:

Northeast

Description:

Gold King Mine tailings dump after water discharge.





**Project Name:** 

Gold King Mine

Site Location:

Silverton, San Juan County, Colorado

Project No. 0001/1408-01

Photo No. 53

Date: 08/05/2015

Direction Photo Taken:

East

#### Description:

Looking east across Cement Creek from County Road 10 to excavator fixing County Road 52 at North Fork crossing just south of Red and Bonita Mine.



Photo No. **54** 

Date: 08/05/2015

Direction Photo Taken:

East

#### Description:

Cement Creek crossing at Gladstone.





Project Name:Site Location:Project No.Gold King MineSilverton, San Juan County, Colorado0001/1408-01